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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,060	06/06/2001	Masanori Toyofuku	209241US0	5644

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EXAMINER

SERGEANT, RABON A

ART UNIT PAPER NUMBER

1711

DATE MAILED: 06/09/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/874,060	TOYOFUKU ET AL.	
	Examiner	Art Unit	
	Rabon Sergent	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 31, 2003 has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 218881 in view of JP 3-229773.

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EP 218881 discloses non-porous, moisture permeable polyurethane coating compositions comprising the reaction product of an isocyanate terminated prepolymer and a curing agent. The prepolymer is prepared by reacting a polyisocyanate, preferably an aromatic polyisocyanate, and a blend of polyols, wherein the blend comprises 50%-98% by weight polyoxyethylene polyol having a functionality of at least three and 2%-50% by weight polyoxyethylene diol, wherein the total ethylene oxide content is at least 70% by weight. Furthermore, at the disclosed molar ratio of the polyol to diol, the blend's average functionality overlaps that claimed by applicants.

4. Though the primary reference's blend's average functionality range is broader than that of the instant invention, the position is taken that it would have been obvious to operate at the upper end of the reference's functionality range, because one would have expected the increased crosslink density resulting from using an increased functionality blend to reduce swelling of the films. Furthermore, though the primary reference discloses the preferred use of aromatic polyisocyanates, the reference fails to indicate that diphenylmethane diisocyanate is a preferred polyisocyanate. However, the use of diphenylmethane diisocyanate as a reactant for producing prepolymers for similar non-porous, moisture permeable polyurethanes was known at the time of invention. See JP 3-229773. The secondary reference discloses that films produced using diphenylmethane diisocyanate have a good balance of elongation and mechanical strength and possess good flexibility. In view of these teachings pertaining to obtaining enhanced properties, the position is taken that it would have been obvious to utilize diphenylmethane diisocyanate as the aromatic polyisocyanate of the primary reference, so as to arrive at the instant invention.

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5. Applicants have argued that their showings of unexpected results, attributable to the use of diphenylmethane diisocyanate and the claimed functionality range of the polyoxyalkylene polyol mixture, rebut the *prima facie* case of obviousness. The examiner has carefully considered the relied upon showings, set forth within Table 1, in conjunction with applicants' arguments; however, the position is taken that the data set forth within Table 1 for examples 1 and 2 is not considered to set forth unexpected results, when compared to example 3 (considered to be representative of the prior art). Absent further response, it is argued that the results would be expected given the increase in polyol functionality and the variation in ethylene oxide content.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

**RABON SERGENT
PRIMARY EXAMINER**

R. Sergent
June 5, 2003